

A Music Database for Emotion Research and an Interactive Platform for Music-Emotion Annotation through Systematic Review

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Music emotion analysis has increasingly attracted the attention among Music Information Retrieval (MIR) community over the years. Since music-emotion describes a specific emotional meaning of a music clip, it has become a useful tool for listeners to arrange their personal music collections. Collection of such subjective data is important for further research in the fields of MIR and music data mining. To identify the current status of research in the above fields, a systematic literature review (SLR) was carried out considering 117 studies from six electronic databases where 12 studies were selected for detailed analysis. SLR resulted in several key findings: Majority of studies on emotion metadata have focused on the western world, whereas other cultural-specific music such as Sri Lankan folk music are left behind regardless of their richness in emotion expression; discrete and dimensional emotion models have been commonly used; in collecting human annotations higher attention is required on demographics as individual differences matter in music emotion perception. Based on the findings and opening new avenues for researchers worldwide to computationally explore the least explored melodies, we present a music database of a set of 76 music stimuli based on Sri Lankan folk melodies. A platform was developed to collect emotion annotations enabling both categorical and dimensional emotional ratings. Annotator profile considers a number of demographic factors. The study will facilitate intelligent, large-scale music analysis through introducing a novel dataset and an emotion annotation platform. Moreover, this effort will contribute in preserving and promoting Sri Lankan folk melodies.

Keywords: Emotion Analysis, Music, Database